

NATIONAL AERONAUTICS and SPACE ADMINISTRATION

Chief Financial Officer's Annual Report and Five-Year Plan

For the Period 1999 - 2003

September 1999

Prepared by the Office of the Chief Financial Officer

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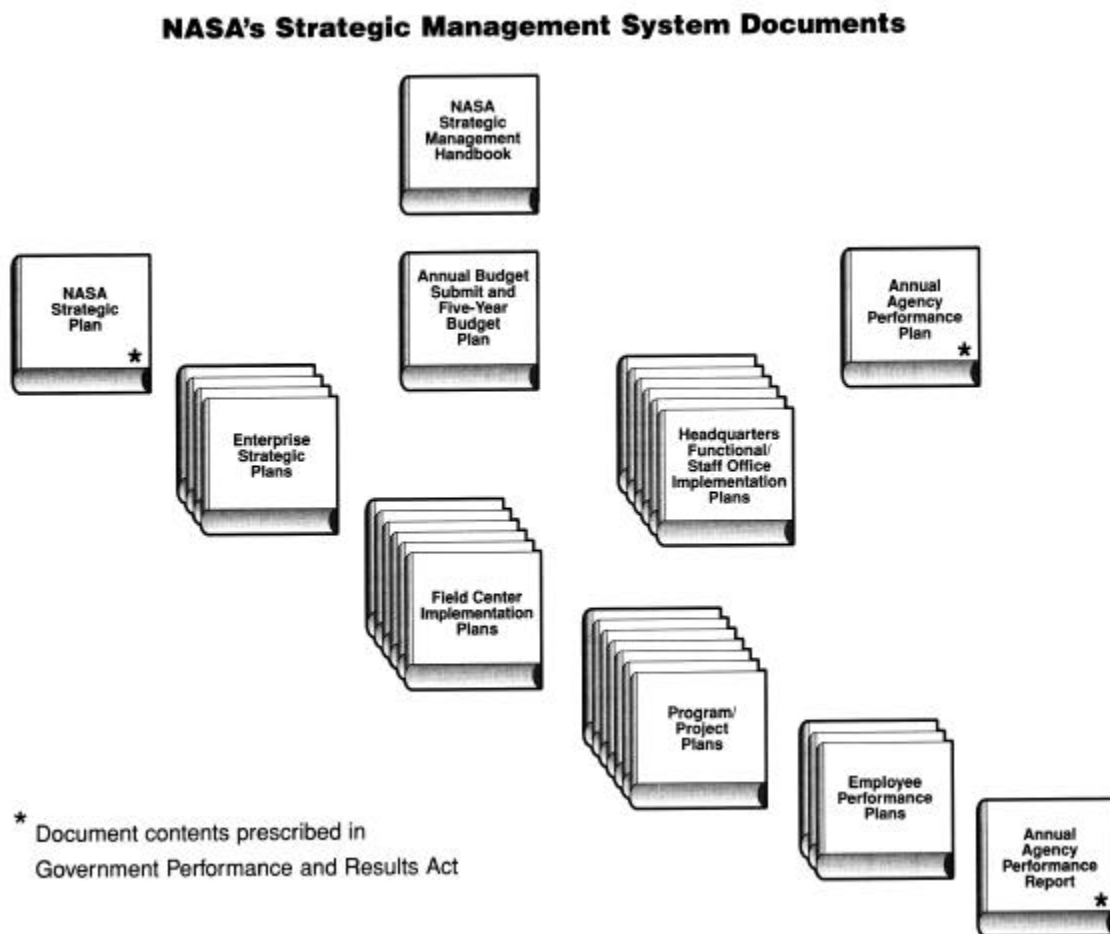
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1.0 Introduction

This document provides the Chief Financial Officer's (CFO) annual Financial and Resources Management report and related five-year plan for the National Aeronautics and Space Administration (NASA). The report/plan highlights Agency and associated Governmentwide financial and resources management issues. These issues are discussed in terms of their accomplishments, milestones, and future initiatives. (For brevity, NASA's financial and resources management activities are also referred to collectively as CFO activities and financial management activities.)

NASA's Annual Report and Five-Year Plan also serve as NASA's Financial and Resources Management Strategic Functional/Staff Office Implementation Plan. As such, this Five-Year Plan not only complies with external CFOs Act requirements, but also provides related plans, strategies, and status information for internal NASA strategic management processes.



1.1 AGENCY MISSION

NASA was legislatively established by the National Aeronautics and Space Act of 1958 to conduct space activities devoted to peaceful purposes for the benefit of all humankind. Also, NASA is to preserve the leadership of the United States in aeronautics and space research and development (R&D) consistent with the Agency Mission.

The Agency vision is that NASA is an investment in America's future. As explorers, pioneers, and innovators, NASA boldly expands frontiers in air and space to inspire and serve America and to benefit the quality of life on earth.

NASA's missions are to:

- (1) Advance and communicate scientific knowledge and understanding of the earth, solar system, and the universe, and to use the environment of space for research.
- (2) Explore, use, and enable the development of space for human enterprise.
- (3) Research, develop, verify, and transfer advanced aeronautics, space, and related technologies.

The journey of flight, begun in 1903, has taken American aviators, astronauts, and robotic spacecraft from the dunes of Kitty Hawk to the edge of the atmosphere, to the surface of the Moon, and beyond. American spacecraft have explored more than 60 worlds in our solar system, while methodically peering back in space and time to reveal many of the secrets of the Universe.

1.2 ORGANIZATION

NASA is organized and managed through its Headquarters in Washington, D.C., nine field Centers and one Government-owned, contractor-operated facility. The key organizations, their locations and related missions follow.

NASA Headquarters (HQ) Washington, DC
Leadership and management; consists of the Administrator's Office, four Strategic Enterprises, Functional and Staff Offices, and the Office of the Inspector General (OIG).

Ames Research Center (ARC) Moffett Field, CA
Mission: Aviation Operation Systems and Astrobiology

Dryden Flight Research Center (DFRC) Edwards, CA
Mission: Flight Research

Goddard Space Flight Center (GSFC) Greenbelt, MD
Wallops Flight Facility Wallops Island, VA
Goddard Institute for Space Studies New York, NY
Mission: Earth System Science/Physics and Astronomy

Glenn Research Center (GRC) Cleveland, OH
Mission: Aeropropulsion

Lyndon B. Johnson Space Center (JSC) Houston, TX
Mission: Human Exploration and Astro Materials

Jet Propulsion Laboratory (JPL) Pasadena, CA
Government-owned, contractor-operated facility.
Mission: Instrument Technology and Planetary Science and Exploration

John F. Kennedy Space Center (KSC) Kennedy Space Center, FL
Mission: Space Launch

Langley Research Center (LaRC) Hampton, VA
Mission: Airframe Systems and Atmospheric Science

George C. Marshall Space Flight Center (MSFC) Marshall Space Flight Center, AL
Mission: Space Transportation Systems and Microgravity Research

John C. Stennis Space Center (SSC) Stennis Space Center, MS
Mission: Commercial Remote Sensing

In 1999, NASA employed approximately 18,000 civil servants. The workforce is composed primarily of engineers and scientists. It includes approximately 1,000 professionals focusing on the financial and resources management areas.

1.3 STRATEGIC MANAGEMENT

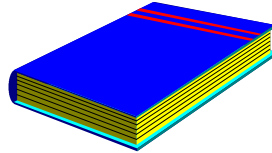
NASA manages its activities through a Strategic Management System. This System integrates the planning, managing and reporting required to manage NASA's missions and related activities. The System also provides the information and results that fulfill the planning and reporting requirements of the Government Performance and Results Act (Results Act). The Results Act directs Executive Branch agencies to develop a customer-focused strategic plan, align Agency activities with concrete missions and goals, manage and measure results to justify Federal funding, and design budgets that

reflect strategic missions. NASA Strategic Management activities occur within a framework that includes several basic elements: (1) External Customers, (2) Strategic Enterprises, (3) Crosscutting Processes, (4) Implementing Strategies and (5) Headquarters and Centers. NASA's implementing strategies are highlighted in the Agency strategic plan and in Enterprise and Center implementation plans. The strategic plan is based on a commitment to satisfy our external customers. The strategic management system and related plans also highlight key Agency and Enterprise goals, as well as, related Crosscutting Processes that enable each Enterprise to develop and deliver NASA's products and services to internal and external customers.

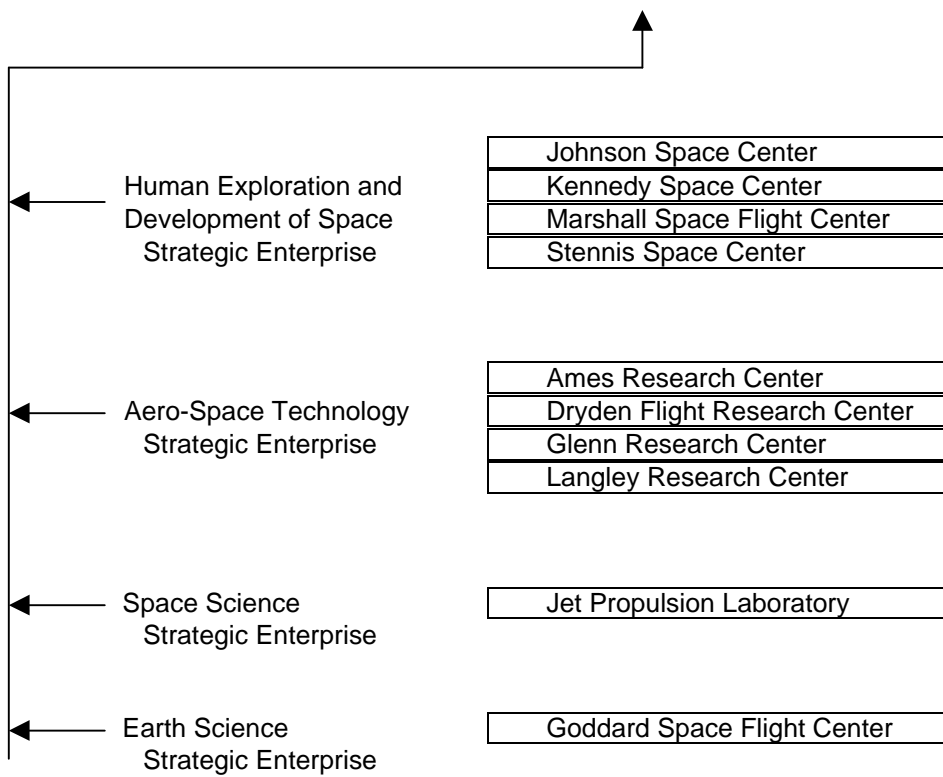
The Strategic Management System integrates strategic planning and implementation planning at the Enterprise and Center levels, program and project plans, and individual employee performance planning. The System also integrates annual and five-year budget planning, and the performance planning and related reporting. NASA's financial and resources activities are specifically noted as a key component within NASA's Manage Strategically Crosscutting Process. The financial and resources area is highlighted in the overall goal for the Process as well as within the related process objectives. This includes the objective to optimize Agency investment strategies and systems to align human, physical, and financial resources with customer requirements, while ensuring compliance with applicable statutes.

Strategic Structure Enterprises and Centers

NASA Strategic Plan



(NASA Headquarters)



2.0 VISION

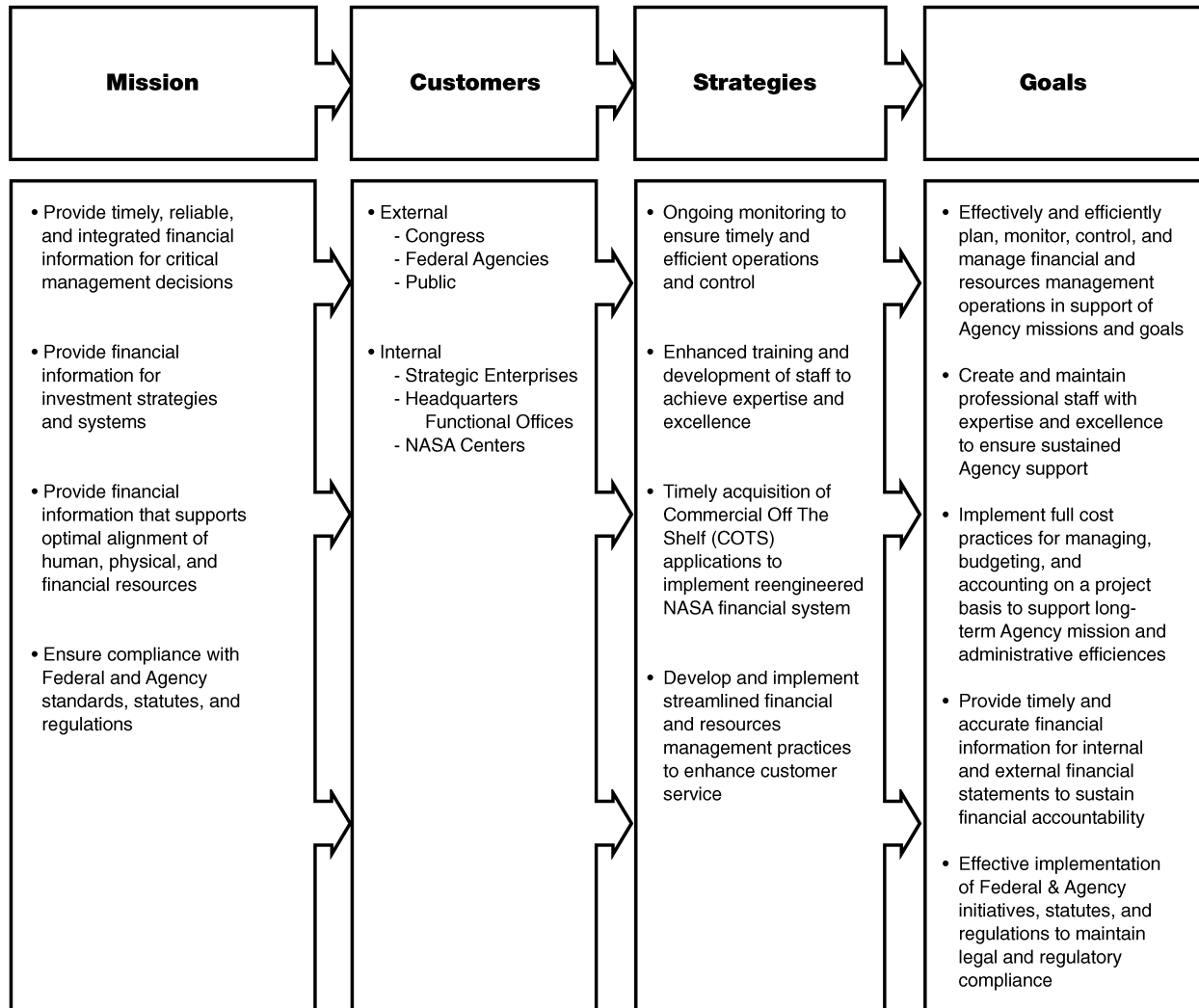
The NASA vision of financial and resources management (Financial Management) includes a world-class team of financial and resources management professionals working in partnership with program and administrative managers and staff to provide timely, accurate, and reliable information through efficient, integrated, financial management systems to effectively plan, guide, control, manage, and support missions. NASA's financial management vision is consistent with the Agency strategic vision, and with the related, broader vision of the Federal Government.

NASA's financial management community supports its broader vision and missions by providing timely, reliable, financial, resources, and performance information to facilitate planning, guiding, controlling, managing and achieving missions and activities. To achieve financial management excellence, the Agency continues to develop and maintain a strong financial and resources management organization to meet the changing requirements and challenges of the 21st century. This includes providing strong customer service to our internal and external customers which enables timely and quality, technical and administrative decisions.

The financial management vision is also consistent with NASA's Strategic Management Plan and related concepts, processes, goals and objectives. Financial and resources management activities directly support the Manage Strategically Process by providing timely, reliable financial information related to critical management decision-making and resource allocations. In addition, financial and resources management activities provide key financial information that supports optimal investment strategies and systems, as well as optimal alignment of human, physical and financial resources with customer and stakeholder requirements. All financial and resources management activities integrate appropriate compliance with applicable statutes and regulations.

The financial management vision is also consistent with the related Federal financial management vision articulated by the U.S. Government Chief Financial Officers (CFO) Council. The CFO Council vision focuses on shaping an environment in which Government officials use high-quality financial and performance information to make and implement effective policy, management, stewardship, and program decisions. The CFO Council's highest priority is assuring reliability of financial information demonstrated by obtaining unqualified opinions on individual agency and the Governmentwide consolidated financial statements. Other critical priority areas include: (1) implementing Federal accounting standards and financial management systems to provide program managers with complete and accurate information on the cost of programs; (2) promoting recruitment, retention and professional development of a high-quality Federal financial management workforce; (3) improving debt collection for major receivable accounts; (4) modernizing financial practices in support of business operations; and (5) providing management guidance for Federal grants. NASA's financial and resources management activities readily align with these broader Federal priorities.

FINANCIAL & RESOURCES MANAGEMENT STRATEGIC PLAN



3.0 STRATEGIES AND GOALS

The fundamental goal of NASA's financial and resources management activities is to effectively support Agency missions. NASA integrates several basic initiatives that focus on efficient and effective: (1) service/operations; (2) staff; (3) systems; (4) statements and reporting; and (5) standards. These initiatives are being pursued through the financial and resources management plan as Agency strategies and goals. The initiatives directly support counterpart Federal financial management strategies and goals.

NASA is pursuing the following financial and resources management strategies:

- (1) Ongoing monitoring to ensure timely, effective and efficient service/operations and control,
- (2) Enhanced training and development of its professional staff to achieve expertise and excellence,
- (3) Timely acquisition of commercial off-the-shelf system capabilities to implement standard, reengineered federal processes consistent with Joint Financial Management Improvement Program financial systems requirements.
- (4) Timely and effective analyses and reconciliations and related financial statements,
- (5) Timely, effective implementation of Federal and Agency standards and initiatives through joint Center/Headquarters teams.

Headquarters management has communicated its ongoing strategies and objectives for financial and resources management, essential to support missions, to Center Directors, Center CFOs, and other Senior Managers, because the timely achievement of these objectives requires their joint and active participation.

NASA plans to achieve required support by providing exceptional ongoing financial and resources management operational performance. To facilitate the acceptance by the NASA workforce of financial and resources management improvement initiatives, such as NASA's full cost and integrated system reengineering initiatives, NASA periodically highlights the key anticipated program and mission benefits of its initiatives.

NASA's fundamental financial and resources management goals focus on efficient and effective support of NASA missions. NASA must proceed with key strategies to help measure performance in terms of meeting the following goals:

- (1) Effectively and efficiently plan, monitor, control and manage financial and resources management services/operations, including key customer support in support of agency missions and goals,
- (2) Create and maintain a financial management professional staff with appropriate expertise and excellence to ensure sustained Agency support,

- (3) Implement an integrated financial management system, including capabilities designed to support full cost practice for managing, budgeting, and accounting on a project basis in addition to other Agency management improvements,
- (4) Provide timely, accurate, useful, reliable, and verifiable external financial statements, financial performance information and internal financial information to support sustained accountability for appropriated resources,
- (5) Effectively implement Federal and Agency initiatives, statutes, standards and regulations.

NASA's goals, objectives, strategies and initiatives are consistent with Governmentwide goals/priorities identified by the U.S. Government's CFO Council and established by the Office of Management and Budget in its Federal Financial Management Status Report & Five-Year Plan. The Federal priorities are to: (1) improve financial accountability; (2) improve financial management; (3) develop human resources and CFO; and (4) improve management of receivables, electronic commerce and grants administration.

NASA's priority goals, strategies and initiatives, individually and collectively support the Federal Government's basic financial management priorities. Service/operations, statements and standards (including full costs practices) initiatives support the Federal accountability priority by focusing on efficient and effective operations and related controls and reporting. The systems initiative supports the Federal system improvement priority, as well as Federal electronic commerce, receivables and grants management priorities. The staff initiative supports the Federal human resources priority by developing experienced professional staff.

4.0 INITIATIVES

NASA has made considerable progress in pursuing its financial and resources management activities, by focusing on several basic strategies. Strategies can be grouped into several interrelated priority initiatives.

These initiatives involve service/operations, staff (human resources), systems, statements and reporting, and standards (implementation of Federal and Agency standards and initiatives).

<u>PLANS</u>	
	<u>TARGET FY(s)</u>
(1) Maintain, Enhance & Measure Ongoing Service/Operations	1999-03 (Annually)
(2) Implement Agencywide Staff Development Processes	1999-02
(3) Implement an Integrated Financial Management (IFM) System	2000-01
(4) Maintain/Enhance Audited Financial Statement Reporting (Obtain unqualified audit opinion)	1999-03 (Annually)
(5) Implement Full Cost Accounting, Budgeting & Management Practices	2000-02

The following narrative provides summary information on NASA's initiatives, including recent progress, the current status and future plans.

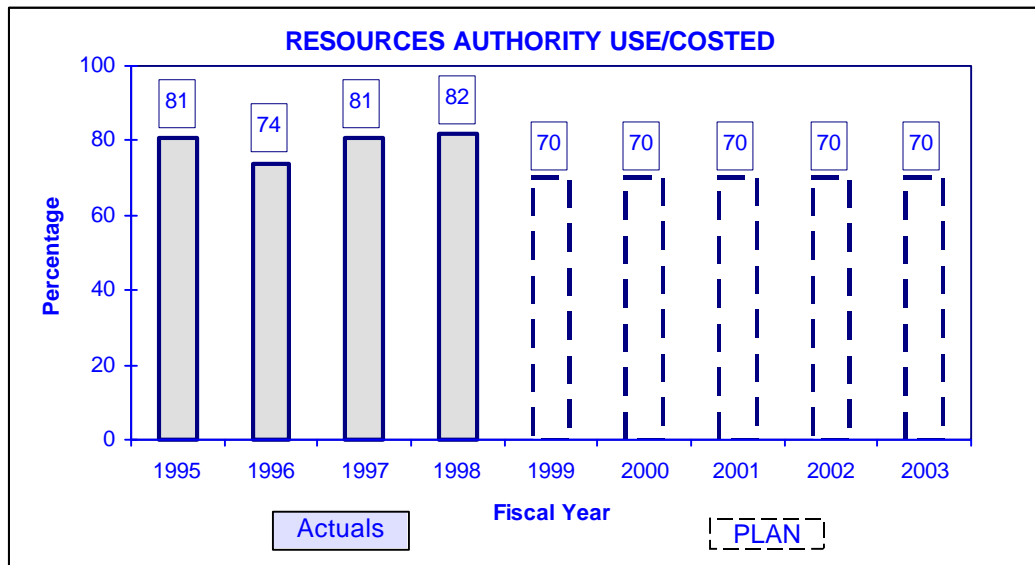
4.1 SERVICE/OPERATIONS

NASA must enhance its ongoing financial and resources management service/operations to successfully achieve Agency and program objectives. These operations are critical to full accountability, disclosure and effective stewardship of Federal resources. These operations include timely, complete formulation and execution of the budget, timely and accurate accounting for activities, assets, liabilities, and equity and timely payment of creditors, including payments to numerous vendors that provide goods and services to NASA. In addition, NASA must provide financial information to key external parties, including reports to the President, Congress, the Office of Management and Budget (OMB), the public, and the scientific community. NASA must continuously monitor Agency compliance with established Federal and Agency financial and resources management policies and practices. One key element of financial management operations involves ongoing monitoring of key performance metrics. NASA also periodically reviews ongoing operations through its quality assurance processes.

4.1.1 FINANCIAL MANAGEMENT PERFORMANCE METRICS

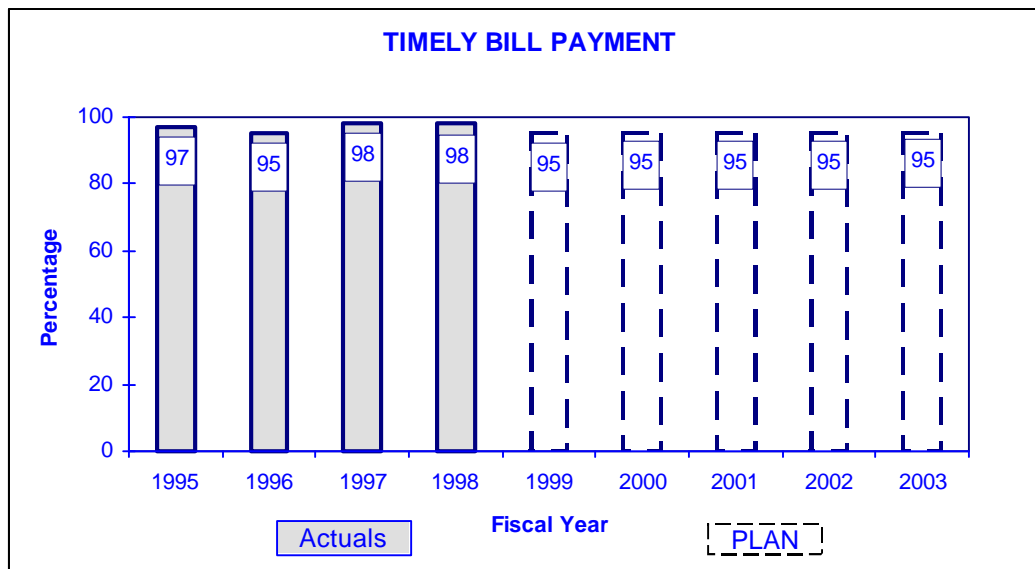
NASA integrates a wide variety of metrics into its financial and resources management (budget, accounting and reporting) activities. While numerous performance metrics are applicable to the financial area, two high-level metrics have been identified for key Government Performance and Results Act (GPRA) performance monitoring. These basic metrics and related supporting metrics are expected to evolve over time as experience with strategic management concepts and performance metrics matures.

NASA financial activities fall into two basic areas: (1) resources management (budgeting), and (2) financial management (accounting and reporting). The selected metrics focus on the effectiveness of financial activities, specifically, the timely and effective use of financial resources and timely effective payments to organizations and individuals who provide goods and services. NASA's monitoring of such metrics is an ongoing element of its financial and resources management operations.



The effective use of the scarce resources provided to the Agency is a critical activity in the resources management area. NASA must effectively plan, control, distribute and use available resources in a timely manner, consistent with NASA strategic and external guidelines.

One key metric that indicates the effectiveness of use of the resources provided through appropriations involves the extent to which available resource authority is used/costed during the performance period. The performance target for this resource metric is to use/cost 70 percent or greater of the available resource authority within the fiscal year.



Note: 1996 Performance adversely impacted by Government Furlough

The timely payment of bills is an important Government cash management activity, as well as an important element of sound professional business working relationships. The timely and accurate payment of vendor bills/invoices, as well as other contractually required payments, is a critical step in the resources use process. Prompt, accurate payment of vendors is also a critical element in the maintenance and enhancement of a solid professional working relationship between NASA and the aerospace industry.

Consistent with the Prompt Payment Act and its intention of paying all bills on time, the realistic goal is to pay at least 95 percent of vendor bills on time. This metric indicates the percentage of the dollar value of vendors' billings, including valid vendor invoices and contract financing requests, that are paid within the Prompt Payment Act and cash management regulation time requirements. The payment date is typically on or about the 30th day after the receipt of a valid vendor bill and the related goods or services.

4.1.2 OTHER FINANCIAL MEASURES

During the late 1990's, NASA performed a comprehensive review of its grant management practices. This review was performed by an intra-agency NASA Grants Management Process Team and included evaluation of other Federal agency's grants management practices. As a result of that review, NASA initiated and maintains a

policy to manage grant funding so that NASA achieves an uncosted carryover of funding on grants of not more than six months. The policy is consistent with grants management practices that stagger grant awards over the course of the fiscal year. In addition, NASA has a related target to obligate 100 percent of Agency funds, directly associated with the grant activities, by the end of the fiscal year. Uncosted obligations, are obligations incurred for which costs have not been accrued.

During the mid-1990's, NASA completed a comprehensive internal review of its contract and grant cost management practices. This review focused on NASA's uncosted balances. Cost is a financial measurement of resources used in accomplishing a specified purpose, such as performing a service, acquiring an asset, or completing a project. In certain circumstances uncosted balances represent opportunities for NASA to improve its use of available resources. As a consequence, NASA attempts to optimize its use of uncosted funds through cost phasing--planning the use/costing of funds over time. During the past few years, NASA's uncosted balances have indicated key improvements. However, to continue this performance, the agency cost phasing plans must be accurate, supportable, and be approved by management. Cost phasing plans must include amounts necessary to: (1) meet the estimated cost of work authorized; (2) comply with the minimum amounts required for uncosted contract liabilities incurred; and (3) provide appropriate levels of program reserves consistent with risks inherent to carry out the activity. Based upon the above criteria, cost phasing plans are expected to result in an accuracy rate of approximately 75 percent of the approved year end cost plan. Such phasing plans cover twelve months, normally the timeframe of a fiscal year, October to September.

In addition to its focus on cost planning, NASA maintains a vigorous obligation and resources authorization/control process. In that regard, NASA financial planning activities focus on optimal fund obligation practices. Except where specifically warranted, the resources authority requested should be capable of being obligated on contract in the year the resources authority is requested. The Program Budget Funding Plan will be the basis for requesting funds and the foundation for 100 percent obligation of funding within sixteen months of their availability for obligation for funds that expire in two years.

4.1.3 DEBT COLLECTION IMPROVEMENT ACT

Ongoing debt collection activities also represent an important operational improvement initiative. In accordance with the Debt Collection Improvement Act of 1996, NASA refers delinquent accounts receivable to the Department of the Treasury for cross-servicing and offset. The electronic funds transfer provisions of the Debt Collection Improvement Act of 1996 have been successfully implemented.

4.1.4 QUALITY ASSURANCE

The Quality Assurance Evaluation (QAE) provides a systematic review of Centers' effectiveness, performance and compliance in their financial and accounting activities. The QAE activity is part of the Agency process to ensure the objectives of Section 4 of the Federal Managers' Financial Integrity Act (FMFIA) have been met. Section 4 focuses on accounting system compliance with appropriate Federal requirements. Centers provide the Headquarters CFO organization with data related to various financial activities that are evaluated to identify: (1) areas with potential to be applied Agencywide; (2) areas where performance is weak and needs improvement; and (3) areas where Headquarters guidance can be improved. After evaluating data, the CFO may elect to perform follow-up evaluations and onsite reviews of selected items. The CFO conducts a QAE of four Centers each year. The QAE process continues to be refined in accordance with current financial management regulations and policies, organizational changes, and the availability of alternative data sources and metrics.

4.1.5 SAFETY

Safety permeates everything done at NASA, and the entire workforce is committed to safety as a priority. The management team is held accountable for safety and must foster an environment with zero tolerance for mishaps and safety of the products and services provided in all aspects of financial and resources management.

4.2 STAFF

NASA must have a professional staff with capabilities commensurate with the challenging requirements of the current and future Federal financial and resources management environment. In that regard, it is important to maintain an appropriate organizational structure for financial and resources management activities and appropriate professional standards for critical CFO positions, appropriately assess and motivate exceptional performance, maintain effective intra-Agency communications, and appropriately train and develop the entire financial and resources management workforce. A variety of key activities has been initiated to achieve these objectives and the related broader goal of professional staff excellence. Staff initiatives include Center CFO Performance Assessments, the CFO Council, and an Agency Training and Development initiative. In addition, the Center CFO's are expected to have full personnel management responsibility for financial and resources management staff.

4.2.1 CENTER CFO PERFORMANCE

In December 1996, the NASA CFO instituted a process to provide an assessment of each Center's CFO and CFO organization to the Center Director as input to the Center's annual performance process. These assessments focus on key financial and resources management initiatives.

4.2.2 NASA CFO COUNCIL

During 1995, an Agency CFO Council was established, chaired by the NASA CFO. This council included all Center CFOs and Deputy CFOs, as well as key financial and resources management executives.

In December 1996, the NASA CFO invited key resources managers from the Agency's four Enterprises (Earth Science; Aeronautics and Space Transportation Technology; Human Exploration and Development of Space; and Space Science) into the NASA CFO Council.

The Council oversees financial and resources management programs and initiatives and provides advice on major issues to the CFO. It also supports needed improvements in the quality of financial data and internal controls and serves as a forum to monitor progress, resolve issues, provide coordination, and develop consensus on new directions in financial and resources management.

The Council meets on a periodic basis through teleconference and through NASA's Video Teleconference System, meetings, and through an annual Conference. The NASA Center Deputy Chief Financial Officers (Finance) also meet semiannually to address issues impacting the financial management arena.

4.2.3 TRAINING AND DEVELOPMENT FOR PROFESSIONALS

In April 1996, the NASA CFO designated an Agency Leader (Center CFO) to pursue an Agencywide approach to staff development. This approach directed Center CFOs to initiate new staff development programs, or strengthen existing programs to not only meet the requirements of the CFOs Act, but also contribute to the development of financial and resources management personnel.

The CFO is involved in the recruitment and selection process for all key financial and resources management positions. This involvement supports the timely selection of

highly-qualified candidates as top financial and resources managers. NASA continues to pursue the recruitment, development and retention of highly-qualified financial and resources management leaders. These efforts continue to be significantly complicated by the dramatic agency staff downsizing that has been occurring. NASA's current Agencywide approach to staff development includes active Center participation that is expected to provide a strong, cost-effective, Agencywide, cross-Center training and development program. The Agencywide training and development program is being managed by Center financial and resources management staff with oversight and participation from each Center and Headquarters, as well as from key Agency and Center human resources staff.

This long-term staff development project builds upon the Joint Financial Management Improvement Program (JFMIP) and the Governmentwide CFO Council work in this area. The effort is being phased in during the next few years and is expected to establish the financial and resources management human resources development framework for ongoing pursuit of professional staff excellence. This effort is critical to long-term effective and efficient financial management.

During 1998, the CFO published and distributed the Financial and Resources Management Career Development Guide and the Individual Development Plan (IDP) Advisor. The Career Development Guide is a consolidated reference document for employees and supervisors to aid in career development planning for members of the CFO community. The IDP Advisor guides employees and supervisors through a process to develop a personal action plan, identifying short and long-term career goals. Each IDP reflects specific training and other developmental experiences in support of these goals, including planned completion dates.

4.3 SYSTEMS

NASA's systems process millions of transactions annually, with several hundred employees inputting data. This environment is susceptible to error, human as well as data processing. Considering the volume of activity, the errors and deficiencies (noted in past audits by the General Accounting Office (GAO), the NASA Office of Inspector General, and in internal reviews) are not unusual, unexpected, or extraordinary. While the scope and volume of activity are not a justification for related complications, this activity does place the overall system performance in context.

The fundamental weakness of these existing systems is the lack of an efficient, economical standard, transaction-based, integrated system for Centers and Headquarters. This matter is being addressed through the establishment (February 1995) of the Integrated Financial Management (IFM) Program, with a goal to implement

a standard integrated financial management system for the Agency.

The program is comprised of a management staff located at NASA Headquarters and various process teams whose membership includes individuals from Headquarters and all Centers. (See following Systems section for details on NASA's system initiative.)

4.4 STATEMENTS AND REPORTING

NASA must provide reliable, useful, verifiable, timely financial resources and performance information and reports on its operations and activities. In that regard, significant reporting improvements have been achieved during the past few years and plans are to continue to enhance reporting in the future. During 1999, NASA received its fifth consecutive unqualified audit opinion on its annual financial statements. These statements were developed and audited pursuant to the CFOs Act of 1990 and the Government Management Reform Act of 1994.

For FY 1998, NASA reported under new financial statement formats prescribed by OMB in response to new Statements of Federal Financial Accounting Standards recommended by the Federal Accounting Standards Advisory Board and approved by OMB, the U.S. Department of the Treasury, and the General Accounting Office. One of the key financial statement standard/format changes resulted in "The Statement of Net Cost." This statement is analogous to the profit and lost statement in the private sector. This statement reflects the Agency's ability to effectively and efficiently use appropriated funds. To complete its FY 1998 Statement of Net Cost NASA used cost finding techniques and analyses. The activity also integrated key full cost accounting and new depreciation information and resulted in an unqualified "clean" audit opinion on this statement and other NASA financial statement disclosures.

4.5 BUDGET FORMULATION/EXECUTION

The GPRA directs agencies to align programs and activities with concrete missions and goals, manage and measure results to justify appropriations and authorizations, and design budgets that reflect strategic missions. NASA's Strategic Plan provides the top level strategy of what it does, who its customers are, where it is going and why.

In developing budget requests and operating plans, each Center and Enterprise must ensure that existing and proposed new programs directly support the mission, goals and objectives presented in the Performance Planning arena. GPRA also requires submittal of an annual Performance Plan to Congress. The revised FY 1999 Plan and FY 2000 Plan have been submitted to the Congress. NASA must be able to demonstrate key

Agency results of the Enterprise and Program Office through metrics. Such results must also correlate with actual and planned levels of performance.

The FY 2002 budget will reflect the process of presenting a totally integrated budget planning document. It presents a complete picture of Agency resources, encompassing dollars and workforce, available for planning the budget requirements through FY 2005. It reflects incorporation of the Strategic Enterprises, Functional Staff Offices and Lead Centers. This package is a direct response to the highest priority identified by the Centers to receive a single budget call containing all resource guidance.

4.5.1 STREAMLINING

NASA must appropriately streamline and optimize its financial and resources management operations and activities in support of missions. Several years ago, a streamlining initiative was started in conjunction with declining budgets and resulting organization and management restructuring to strengthen financial (accounting) management and resources management operations and processes. Such ongoing streamlining is expected to be further supported through the NASA's Integrated Financial Management Program, a new system initiative designed to support standard streamlined Agency practices.

Streamlining activities implemented without the planned new integrated system include:

- (1) Simplification of NASA planning process to a Single Program Operating Plan (POP) process per year rather than several.
- (2) Early release of Resources Authority Warrants to facilitate timely commitment and obligation of funds.
- (3) Consolidated POP guidance issued by the Office of the CFO instead of separate Headquarters Office issuances.
- (4) Abbreviated OMB budget justification material and
- (5) Consolidation of distributed payroll processing to a single agency location.

Streamlining activities yet to be implemented without the planned new integrated system include:

- (1) Small purchase bankcard to be mandatory for purchases of \$25,000 or under.
- (2) Remittance Express, by which the private sector initiates payments to the Federal Government for electronic receipt.

The streamlining activity to be implemented in conjunction with the planned new integrated system includes the development of an automated interface between the

Department of Health and Human Services Grant Payment System and the NASA core accounting system. Such streamlining will provide for accurate drawdown distributions, recording of monthly cost accruals, timely relief of advance accounts, and posting of actual disbursement data to sub-accounts.

4.6 STANDARDS AND INITIATIVES

During the next several years, NASA must effectively and efficiently implement a variety of new Federal and Agency standards and initiatives to support long-term financial and resources management excellence. These standards include recent Federal standards related to managerial cost accounting (full costing), as well as other key Federal and Agency initiatives.

4.6.1 FULL COST INITIATIVE

NASA's Full Cost initiative introduces new cost accounting, budgeting and management practices. The full cost concept and approach integrates full-cost accounting, budgeting, and management practices to enhance cost-effective mission performance by providing complete cost information for improved (more fully informed) decision-making and management. The initiative introduces a concept that ties all costs (including Civil Service personnel costs) to major activities (programs and projects) and budgets, accounts, reports, and manages programs and projects from a full-cost perspective. While the title implies financial matters, the approach to implementation includes broad and significant management implications. Full costing also supports full disclosure and reporting on programs and projects with an improved matching of costs with related program and project performance. In that regard, full costing is consistent with sound business practices and with recent legislative and administrative guidance, including the CFOs Act of 1990, Government Performance and Results Act of 1993, and the National Performance Review.

The implementation of full costing is targeted to occur during the next few years. This target is contingent upon a variety of related activities, including the timely implementation of NASA's new integrated system.

4.6.2 SCHEDULE

The full cost initiative work has been divided into the following phases.

<u>Phase</u>	<u>FY</u>	<u>Status</u>
Concept	1995	Complete
Requirements	1995/6	Complete
Prototype Testing	1996	Complete
Agency-wide Test	1997/9	Complete
POP 98-2 Test	1999	Complete
Implementation	2000/2	Planned
Operation	2002	Planned

The concept phase involved developing an approved concept for full costing. The requirement phase involved identifying the basic full costing requirements to be satisfied by the new integrated system. The prototype phase involved prototype testing and refining the full cost concept at selected Centers. The Agencywide test phase involved testing full cost budgeting and accounting at all Enterprises and Centers. The implementation and operational phases involve implementing and operating full practices across NASA, using the new integrated system.

The concept phase was completed in early 1996, with the approval of the full costing concept. The requirements phase was completed in early 1996. At that time, full costing requirements were integrated into the integrated system project and its related COTS system acquisition process. The prototype-testing phase of the full-cost concept was completed at three Centers in 1996. The Agencywide Test Phase of the full-cost initiative was completed in 1999. This phase demonstrated analytically that the basic full cost concept and approach are sound and workable, contingent upon timely implementation of a new integrated financial management system that will support full cost practices. This initiative continues to progress on schedule toward initial implementation of key practices in FY 2000-02.

4.6.3 RESOURCES

NASA requires key human and financial resources to maintain ongoing operations and to achieve the numerous initiatives that are required to maintain appropriate support for missions in the coming years.

5.0 FINANCIAL SYSTEMS

NASA's accounting principles, standards, and system design were approved by the GAO in 1969. Over the years, NASA's financial systems have remained in basic conformance with evolving accounting principles and standards established by the GAO. However, to optimize support of the Agency mission, the systems require significant enhancement. While the systems, broadly construed, have been relatively effective in providing verifiable financial information, the systems are not efficiently integrated and are not efficient or economical and related processes and practices are not appropriately standardized.

Existing systems currently provide budgetary information, employ common account classifications, common definitions, internal controls, and consistent reporting formats. In addition, NASA's accounting policy is technically sound and well-documented. Headquarters oversight and quality assurance evaluations are conducted to insure compliance with policy promulgations.

A survey of the current accounting systems disclosed the following major issues:

- (1) Most systems are batch input/output "flat file" systems.
- (2) The characteristics of existing systems makes major changes difficult and not cost effective with the advent of the IFM System.
- (3) Common hardware and software are not in use, which prevents effective, efficient exchange of applications software among Centers.
- (4) The maintenance of unique Center-level systems is more costly than standardized systems.
- (5) The many non-integrated functions necessitate constant reconciliation and the redundant input of data.
- (6) Most Centers were planning major upgrades of their systems.
- (7) Funds control activities need to be upgraded to a real-time basis.
- (8) Systems need improvement for adherence to prompt payment guidelines.
- (9) Efficient implementation of the mandated U.S. Standard General Ledger would require considerable and costly programming efforts through existing systems.

NASA INVENTORY OF CURRENT FINANCIAL AND REPORTING SYSTEMS

NAME OF SYSTEM	COMPONENTS SERVED	REPLACEMENT	CLASSIFIED
Financial and Contractual Status System	HQS	COTS	Significant Area of Concern
General Ledger Accounting System	HQS	COTS	Significant Area of Concern
Agency Reimbursable Reporting System	HQS	COTS	Significant Area of Concern
Status of Approved Programs Systems	HQS	COTS	Significant Area of Concern
Agencywide Coding Structure	HQS	COTS	Significant Area of Concern
Preliminary Accrued Cost	HQS	COTS	Significant Area of Concern
Financial Highlight System	HQS	COTS	Significant Area of Concern
Cost, Obligations, Accruals and Disbursements Accounting System	AMES	COTS	Significant Area of Concern
Fiscal Accounting System	GSFC	COTS	Significant Area of Concern
Financial Accounting System Teleprocessing	HQS	COTS	Significant Area of Concern
Interactive Basic Accounting System /Basic Accounting System	JSC	COTS	Significant Area of Concern
Space Transportation Accounting and Resources System	KSC	COTS	Significant Area of Concern
Resources Management System	LaRC	COTS	Significant Area of Concern
Accounting System	GRC	COTS	Significant Area of Concern
Marshall Accounting and Resource Tracking System	MSFC	COTS	Significant Area of Concern
Management Accounting and Statusing System	SSC	COTS	Significant Area of Concern

5.1 FINANCIAL SYSTEMS PLANNING

The objective of the financial systems section of the Agency CFO Five-Year Plan is to provide a baseline of the current financial systems structure, a target for the financial systems structure in the future, and plans for how to get from the current structure to the targeted structure.

5.2 BASELINE STRUCTURE

Currently, the financial management systems structure is a series of Agencywide and Center-unique automated systems. These systems support budget, financial, and procurement functions. Each Center has a specific financial accounting system, which, in some cases, is integrated with Center budget systems. These systems are augmented by Agencywide systems in the areas of Personnel, Payroll, Procurement, Supply and Inventory.

5.3 NASA's ACCOUNTING SYSTEMS

Accounting systems were designated as a "High-Risk" by the Office of Management and Budget (OMB) in June 1989. This designation was based on the need to modernize and standardize systems.

The High-Risk category has been discontinued by OMB. In that regard, the previously reported Financial Systems-Accounting High-Risk classification, which detailed a corrective action plan for the establishment of a single Agencywide accounting system, pursuant to OMB Circular A-127, has been closed. A new Financial Management Systems Material Weakness was established to incorporate the implementation of the Integrated Financial Management (IFM) system. This categorization was subsequently down graded to a Significant Area of Concern in 1998, based on NASA's sustained performance in providing auditable financial reports for the past several years. Nevertheless, while existing systems and staff reconciliations and reporting practices have been effective, the multiple systems, absence of standardization and level of reconciliations are far from efficient or economical. As a consequence, NASA's ongoing IFM System initiative remains critical to long-term efficient and economical compliance with Federal requirements.

5.4 TARGETED NEW STRUCTURE

NASA determined that, to achieve the targeted standard, integrated financial

management systems structure, it must initiate an activity that will result in a standard set of business processes and systems. OMB directed agencies to focus on commercial-off-the-shelf (COTS) system approaches as the highest priority when agencies analyze alternatives for replacing financial management systems. The system must provide a financial management core as well as integrated budget, procurement, time and attendance, and travel modules that will meet the needs of functional and end-users, and all levels of decision makers.

In February 1995, the NASA CFO initiated the Integrated Financial Management Project (IFMP) with a goal of establishing an integrated financial management system for the Agency that complies with the Joint Financial Management Improvement Program (JFMIP) requirements and meets Agency management and mission support requirements.

The current strategy is to acquire and implement a COTS system that meets the CFOs Act and Federal Financial Management Improvement Act requirements for an integrated Agency accounting and financial management system, including financial reporting and internal controls. In 1997, NASA contracted with Klynveld Peat Marwick Goerdeler (KPMG) to provide such a system. High-level executability testing began in December 1998 at the MSFC Integrated Test Facility and was completed in May 1999. Detailed validation testing was initiated in mid-June 1999 and is expected to continue until late 1999. Initial site operations are planned for 2000.

5.5 SYSTEM REQUIRED TO MOVE FROM BASELINE TO TARGET

The goal of the IFM system is to establish an integrated financial management system. The IFM Program Office is leading a large and complex initiative that will change the way financial and business management is performed. Each and every employee will be impacted by these changes. Given the magnitude of this effort, senior management determined that no one Center could leverage sufficient influence to bring about such large-scale changes and improvements; therefore, the system implementation is being managed by Headquarters with support from all Centers.

Centers are involved in all aspects of implementation, including reengineering business processes, configuring and testing the new system, and preparing employees to work in the new environment. There are two functional phases.

Phase I processes are core financial, budget, travel, time and attendance, labor distribution, procurement, and an executive information system.

Phase II processes are fixed assets, personnel/payroll, and grants management.

In May 1995, the Phase I Process Teams began reengineering their respective processes, ensuring seamless integration among the processes, defining functional requirements and developing a data model and data dictionary. This work was completed in April 1996 and was included in the Request for Proposals which was released in June 1996.

Late in FY 1995, Center Transition Teams were formed. The teams are comprised of functional and technical people responsible for planning and implementing the new IFMP system at their respective Centers. Transition managers and other key individuals at Centers are working with project staff and consultants on detailed plans for successfully implementing the large-scale changes the new software and business processes will bring.

Key Phase II activities have also been initiated. The Asset Management Process Team began its reengineering work in late summer 1998. This is a large and complex area. The initial planning, business process reengineering, and requirement definition for asset management have been completed and a Statement Of Work is expected to be issued in late 1999.

The Human Resources Process Team was formed in October 1998, and completed its business process reengineering and functional requirements. Data and technical requirements are in development, with completion expected in late 1999.

The Process Teams and Program Office staff have been working with KPMG on finalizing plans and configuring the Phase I system. On December 1, 1998, the IFM system was received for inspection. NASA and an Independent Verification and Validation contractor are conducting tests prior to deployment at the first Centers in 2000. Completion date for the deployment of the Phase I IFM systems to all Centers is expected to occur in 2001.

A special team was formed in 1999 to review the Phase II implementation schedule and recommend a Phase II deployment strategy that ensures there is no interference with the implementation of the Phase I components. The strategy for Phase II implementation is expected to be finalized in late 1999.

6.0 AUDITED FINANCIAL STATEMENTS

For the fifth year in a row, NASA has received an "Unqualified Opinion" on its consolidated financial statements. This is a tribute to the outstanding efforts of all NASA personnel in managing and reporting on financial resources. NASA financial statements also show the full cost of programs, including depreciation of Agency property, plant, and equipment; and allocations of key common administrative cost.

6.1 ACCOUNTING AND REPORTING STANDARDS

The OMB promulgates Financial Accounting Principles and Standards. Such accounting principles and standards are recommended by the Federal Accounting Standards Advisory Board (FASAB).

Pursuant to Federal standards and guidance, NASA's FY 1998 financial statements were prepared in accordance with the following hierarchy of accounting principles, standards, and requirements:

- (1) Federal accounting standards as recommended by the FASAB, approved by the Director of OMB, the Comptroller General of the United States, and the Secretary of the Treasury; and concurrently issued by OMB and the General Accounting Office.
- (2) Circular No. A-134, "Financial Accounting Principles and Standards."
- (3) OMB Bulletin No. 97-01, "Form and Content of Agency Financial Statements," as amended.
- (4) Accounting principles published by other authoritative standard setting bodies and other authoritative sources.

In addition, NASA implemented the provisions of the following new Statement of Federal Financial Accounting Standards (SFFAS) with the FY 1998 financial statements:

- (1) SFFAS No. 4, "Managerial Cost Accounting Concepts and Standards for the Federal Government."
- (2) SFFAS No. 6, "Accounting for Property, Plant, and Equipment."
- (3) SFFAS No. 7, "Accounting for Revenue and Other Financing Sources and Concepts for Reconciling Budgetary and Financial Accounting."
- (4) SFFAS No. 8, "Supplementary Stewardship Reporting."

6.2 FINANCIAL STATEMENTS

NASA financial statements were prepared for Fiscal Year 1997 and 1998 to report the financial position and results of operations, pursuant to the requirements of the Chief

Financial Officers (CFOs) Act of 1990 and the Government Management Reform Act (GMRA) of 1994. The statements were prepared from the books and records of NASA, in accordance with the related Federal Government comprehensive basis of accounting. The statements are also consistent with guidance specified in OMB Bulletin 94-01, "Form and Content of Agency Financial Statements," and supplemented by OMB Bulletin 97-01, "Formats and Instructions for the Form and Content of Agency Financial Statements," and NASA's accounting policies.

NASA's financial statements were prepared under the accrual basis of accounting, where expenses and revenues are recorded in the accounts in the period in which they are incurred or earned. The statements are, therefore, different from the financial reports, prepared pursuant to OMB directives, and are used to monitor and control use of budgetary resources. The statements were prepared from the same books and records and are consistent and fully reconcilable.

6.3 FY 1998 AUDIT

In the opinion of Arthur Andersen, an independent accounting firm, NASA's FY 1997 and 1998 financial statements presented fairly, in all material respects, its financial position as of September 30, 1997, and 1998, and the results of operations and changes in net position for the years then ended in conformity with the related appropriate Federal comprehensive basis of accounting.

6.4 ACCOUNTABILITY REPORT

The 1998 Accountability Report included the Annual Statement of Assurance for FY 1998, as required by the Federal Managers' Financial Integrity Act (FMFIA). This was the fifth consecutive year in which NASA has received an "Unqualified Opinion," the highest possible rating provided by the audit profession.

The report was reengineered to provide concise and informative facts, figures, and program information to reflect programs and objectives. NASA plans to continue its streamlining and upgrade reporting, including exploration of improved graphics and color materials to enhance report quality and customer communications.

7.0 FEDERAL MANAGERS' FINANCIAL INTEGRITY ACT

The FMFIA requires Agencies to annually provide a statement of assurance regarding management controls and financial

systems. NASA's management controls and financial systems, taken as a whole, provide reasonable assurance that the objectives of the FMFIA (specified in Sections 2 and 4) have been achieved. (Section 2 of the FMFIA focuses on the adequacy of internal controls to prevent fraud, waste, abuse, and mismanagement. Section 4 of the FMFIA focuses on accounting system compliance with appropriate Federal requirements.) NASA conclusions regarding FMFIA are based on the review and consideration of a variety of evaluations, internal analyses, reconciliations, reports and other information, including quality assurance, General Accounting Office and Office of the Inspector General audits, an independent public accountant's (IPA's) opinion on our financial statements and the IPA's reports on compliance with laws and regulations.

NASA has achieved continued progress in strengthening management controls in spite of downsizing and budget pressures that result in greater management risk. Examples are: (1) a complete revision and expansion of the program/project management process; (2) an Agency-level effort to streamline and consolidate the grants management process; (3) corrective actions to improve information technology security; and (4) eight Centers have obtained third-party International Organization for Standardization (ISO 9001) certification. The ISO certification is an internationally recognized quality certification. Current plans indicate that all Centers will be ISO 9001 certified for critical processes by the end of FY 1999.

Our conclusion that NASA has reasonable controls does not mean it is without management improvement opportunities. Audits, internal reviews, and other evaluations have revealed management weaknesses in individual systems. We are aggressively correcting identified weaknesses.

NASA is committed to continuously improve management of programs and related controls, independently, and to removing unnecessary, burdensome requirements and controls while evaluating streamlined processes to ensure reasonable controls remain in place. NASA is committed to improving every aspect of management.

8.0 FEDERAL FINANCIAL MANAGEMENT IMPROVEMENT ACT (FFMIA)

The FFMIA requires agencies to report on substantial compliance with Federal financial management system requirements, applicable Federal accounting standards, and the requirement to record transactions consistent with the U.S. Government Standard General Ledger at the transaction level. In accordance with OMB Bulletin No. 98-08, "Audit Requirements for Federal Financial Statements," as amended, the test results of the independent public accountants disclosed no instances of noncompliance with the three requirements of the FFMIA.

8.1 SIGNIFICANT AREAS OF CONCERN

NASA is continuing to increase its level of effort on the following five significant areas of concern:

Financial Management Systems: NASA recently reduced the material weakness in financial management systems to a significant area of concern. NASA has achieved substantial compliance with Federal accounting principles, Standard General Ledger requirements, and Federal financial system standards. Improvements have been made in establishing a single Agencywide financial management system, and assurance has been provided by its independent public accountant (IPA) financial audits over the past several years. Also, NASA has responded to reportable conditions identified by its IPA by strengthening coordination with Centers to ensure implementation of new accounting policies and procedures and by establishing a new process to resolve all audit findings.

Equitable Environmental Cost Sharing: NASA issued an Agency-level directive (NPG 8850) establishing requirements, responsibilities, procedures, and guidelines related to the identification of Potentially Responsible Parties (PRP) related to environmental cost sharing. NASA also developed cost-sharing or cost-recovery arrangements with PRPs. Ames Research Center entered into a settlement agreement with the Navy and three private companies to cleanup a Superfund site. Marshall Space Flight Center and two other facilities reached agreement with the Army for cleanup of formerly utilized defense sites. During 1999, the Centers will conduct preliminary PRP analyses to determine whether PRPs exist at the Center. If PRPs are found, the Centers will initiate full PRP analyses to determine whether cost sharing or cost recovery arrangements are in NASA's interest and will initiate negotiations with those PRPs to develop cleanup agreements.

Information Technology (IT) Security: NASA conducted a comprehensive review of its IT security posture. The review produced 33 recommendations, all accepted by the Agency, to further strengthen NASA's IT security.

In 1998, a new IT security policy directive was issued. The related procedures and guidelines document is in final review. A public key infrastructure for digital signature, authentication, and encryption is now ready for full implementation. Firewalls were implemented at all Centers and Headquarters. NASA has worked with GAO and its independent public accountant on Agency's financial systems IT weaknesses to improve system security. NASA has prepared an IT security training awareness course, conducted workshops, and is establishing a metrics program that will assist in determining the adequacy of the measures taken to ensure IT security.

In FY 1999, IT security training will be enhanced for system administrators and project

managers; deploy its public key infrastructure for signature, authentication, and encryption; hire a senior IT security person for CIO's staff; enhance its incident detection and response mechanism; begin a regular program of penetration testing; review IT security-related directives; and modify or clarify IT security roles, responsibilities, and commitments.

Year 2000 (Y2K) Program: NASA initiated a Y2K program in 1996 to address the challenges imposed on Agency software, hardware, and firmware systems by the new millennium. As of August 1999 all mission-critical systems are Y2K compliant.

Cost Benefit Analysis: In support of the Outsourcing Desktop Initiative (ODIN), the CIO sponsored a business case analysis which indicated the potential of outsourcing for desktop computing environments. Results of the delivery order solicitation process for ODIN demonstrate that the cost of such services has been lowered. The Langley Research Center has been selected to develop and implement, in FY 99, an institutional capability to conduct, or support the conduct of, business cases for Agency, as well as Center-specific IT investments.

NASA is undertaking a full scale OMB Circular No. A-76 study to determine the least expensive method of satisfying the Agency's air transportation needs. Completion of the A-76 study at Marshall Space Flight Center is scheduled for FY 1999.

8.2 IMPEDIMENTS TO THE SUBMISSION OF 1999 AUDITED FINANCIAL STATEMENTS

NASA does not anticipate any impediments that would preclude meeting a March 1, 2000, due date for its FY 1999 statements.

APPENDIX I

ACRONYMS

ARC	Ames Research Center
CFO	Chief Financial Officer
CFOs	Chief Financial Officers Act of 1990
COTS	Commercial-off-the-Shelf
DCAA	Defense Contract Audit Agency
DCFO	Deputy Chief Financial Officer
DFRC	Dryden Flight Research Center
FASAB	Federal Accounting Standards Advisory Board
FFMIA	Federal Financial Management Improvement Act
FMFIA	Federal Managers' Financial Integrity Act
FTE	Full-Time Equivalent
GAO	General Accounting Office
GMRA	Government Management Reform Act
GPRA	Government Performance and Results Act
GRC	Glenn Research Center
GSFC	Goddard Space Flight Center
HQS	Headquarters
IDP	Individual Development Plan
IFMP	Integrated Financial Management Project
IT	Information Technology
JFMIP	Joint Financial Management Improvement Program
JPL	Jet Propulsion Laboratory
JSC	Johnson Space Center
KSC	Kennedy Space Center
LaRC	Langley Research Center
MSFC	Marshall Space Flight Center
NASA	National Aeronautics and Space Administration
NPG	NASA Procedures and Guidance
OIG	Office of the Inspector General
OMB	Office of Management and Budget
PMDP	Project Management Development Program
PRP	Potential Responsible Parties
QAE	Quality Assurance Evaluation
SFFAS	Statement of Federal Financial Accounting Standards
SSC	Stennis Space Center